

*Amendments*

*In the Claims:*

Please amend the claims as follows:

Please cancel claims 1-21.

Please add new claims 22-41.

Sub  
E1

--22. A method of inducing pulmonary vasodilation comprising:  
introducing a vector comprising a nitric oxide synthase gene operably linked to  
an expression control element into the lungs of a mammal in need of pulmonary vasodilation;  
wherein the introduction of said vector into the lungs of said mammal results in  
pulmonary vasodilation that does not significantly affect systemic blood pressure or cardiac  
index.

C1.

23. The method of inducing pulmonary vasodilation as claimed in claim 22,  
wherein said mammal is a human.

24. The method of inducing pulmonary vasodilation as claimed in claim 23,  
wherein said nitric oxide synthase gene is the endothelial nitric oxide synthase gene.

25. The method of inducing pulmonary vasodilation as claimed in claim 24, wherein said endothelial nitric oxide synthase gene is transduced into the lungs of said human in a viral vector.

26. ~~The method of inducing pulmonary vasodilation as claimed in claim 25, wherein said viral vector is an adenovirus vector.~~

27. ~~The method of inducing pulmonary vasodilation as claimed in claim 26, wherein said viral vector is introduced into the lungs of said human as an aerosol.~~

C1 8/22  
28. A method of treating pulmonary hypertension comprising:  
introducing a vector comprising a nitric oxide synthase gene operably linked to an expression control element into the lungs of a mammal in need of treatment for pulmonary hypertension;  
wherein the introduction of said vector into the lungs of said mammal does not significantly affect systemic blood pressure or cardiac index.

29. The method of treating pulmonary hypertension as claimed in claim 28, wherein said mammal is a human.

30. The method of treating pulmonary hypertension as claimed in claim 29, wherein said nitric oxide synthase gene is the endothelial nitric oxide synthase gene.

31. The method of treating pulmonary hypertension as claimed in claim 30, wherein said pulmonary hypertension is primary pulmonary hypertension.

32. The method of treating pulmonary hypertension as claimed in claim 30, wherein said pulmonary hypertension is secondary pulmonary hypertension associated with cardiac or pulmonary disease.

33. The method of treating pulmonary hypertension as claimed in claim 30, wherein said endothelial nitric oxide synthase gene is transduced into the lungs of said human in a viral vector.

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34. ~~The method of treating pulmonary hypertension as claimed in claim 33, wherein said viral vector is an adenovirus vector.~~

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35. ~~The method of treating pulmonary hypertension as claimed in claim 34, wherein said adenovirus vector is AdCMVceNOS.~~

36. ~~The method of treating pulmonary hypertension as claimed in claim 35, wherein said viral vector is introduced into the lungs of said human as an aerosol.~~

Sub E4  
37. ~~A pharmaceutical composition comprising a nucleic acid encoding a nitric oxide synthase gene operably linked to an expression control element, and a pharmaceutically~~

sub  
E4 cont.

acceptable carrier vehicle; wherein said expression control element selectively expresses said nucleic acid encoding a nitric oxide synthase in pulmonary tissue.

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38. The pharmaceutical composition as claimed in claim <sup>37</sup>~~35~~, wherein said nitric oxide synthase gene is the endothelial nitric oxide synthase gene.

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39. The pharmaceutical composition as claimed in claim <sup>38</sup>~~36~~, wherein said pharmaceutically acceptable carrier vehicle is suitable for aerosol delivery.

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40. A method of inducing pulmonary vasodilation comprising: administering to a mammal in need of pulmonary vasodilation an effective amount of the pharmaceutical composition of claim 37, and an effective amount of at least one drug selected from the group consisting of an immunosuppressive agent and a phosphodiesterase inhibitor; wherein inducing said pulmonary vasodilation does not significantly affect systemic blood pressure or cardiac index.

41. The method of inducing pulmonary vasodilation as claimed in claim 40, wherein said mammal is a human.--

add  
E5

### Remarks

Reconsideration of this application is respectfully requested.

Claims 1-21 have been canceled, and new claims 22-41 have been added. Upon entry of the foregoing amendment, claims 22-41 will be pending in the application, with claims 22,